

Serial No. 10/729,265

Docket No. 95,868

REMARKS

Claims 1-14 are pending in this application. Claim 1 is an independent claim. Claims 2-14 are dependent claims.

Claims 10 and 11 have been objected to, and claims 1-14 have been rejected. Claims 10-12 have been rewritten in independent form, as suggested by the Examiner on pages 2 and 4 of the Office Action.

Claims 1, 3, 7, 8, 10-12, and 14 have been amended to improve form without changing substance.

No new matter is being presented, and approval and entry are respectfully requested.

Rejections Under 35 U.S.C. § 112, Second Paragraph

On pages 2 and 3 of the Office Action, the Examiner rejected claims 1-14 as being indefinite for the reasons set forth therein. Applicant submits that amendments to the claims presented above meet the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, Applicant respectfully requests withdrawal of the rejections to the claims under § 112, second paragraph.

Objections to the Claims

On page 4 of the Office Action, the Examiner objected to claims 10 and 11 as being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 10 and 11 have been rewritten in independent form. Accordingly, Applicant respectfully requests withdrawal of the objections to claims 10 and 11.

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Rejections Under 35 U.S.C. § 103(a)

On pages 3 and 4 of the Office Action, the Examiner rejected claims 1-9 and 12-14 under 35 U.S.C. § 103(a) as being unpatentable over Kruse (U.S. Patent No. 4,504,362) in view of O'Hare (U.S. Patent No. 4,459,177) or Bhatt (U.S. Patent No. 5,101,593). Applicant respectfully traverses these rejections for the reasons presented below.

Claim 1 of the present invention recites, as amended, "A solar distillation loop apparatus, comprising ... a first pipe section ... a second pipe section and two substantially vertical pipe sections, ... the two substantially vertical pipe sections connecting respective ends of the second pipe section to respective ends of the first pipe section." In other words, the solar distillation **loop** of the present invention forms a closed-loop system. As can be seen from FIG. 1 of the present invention, liquid and gas circulate throughout the entire loop. The complete loop of the present invention enables the continuous cycling of air with water vapor from the ground surface to a certain depth below the ground surface, where condensation of water occurs as air cycles back to the surface to pick up more water vapor before flowing underground again.

In contrast, the system of Kruse is not a closed-loop system. Referring to FIGs. 2 and 3 of Kruse, sea water is supplied to an evaporator tube 13 through an intake duct 34 that has an intake end with a screen 35. Water vapor in the evaporator tube 13 is drawn off through a vapor duct 42 to a condenser 43. Fresh water in the condenser 43 is withdrawn through a withdrawal pipe 45 to an accumulator manifold 48. The fresh water is then pumped to storage or to a point of use. See Kruse at col. 3, line 47 to col. 4, line 34. As can be more clearly seen in FIG. 2 of Kruse, the intake duct 34 and the withdrawal pipe 45 are not connected. Thus, Kruse discloses a dead-end, u-shaped chamber rather than a loop that continuously circulates liquid and gas throughout the entire loop.

The Examiner has relied on the O'Hare and Bhatt references as disclosing the use of solar energy to heat air and provide electrical energy, respectively. However, neither O'Hare nor Bhatt addresses the features of the invention discussed above. Thus, it is submitted that claim 1 patentably distinguishes over the prior art.

Claims 10-12, which originally depended from claim 1, have been rewritten in independent form and should be allowable for the reasons discussed above.

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Dependent claims 2-9, 13, and 14 depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above.

Therefore, Applicant submits that claims 1-14 patentably distinguish over the prior art. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejections under § 103.

Request for Examiner Interview Prior to Next Office Action

If any of the claims continue to be rejected over Kruse in view of O'Hare or Bhatt after reconsideration of the claims, the Examiner is respectfully requested to contact the undersigned by telephone to arrange an Examiner Interview prior to issuance of the next Office Action.

Conclusion

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted to be in condition for allowance, which action is earnestly solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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Finally, if there are any additional fees associated with filing of this response, please charge the same to Deposit Account No. 502895.

Respectfully submitted,

Date: 1 Mar 06

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